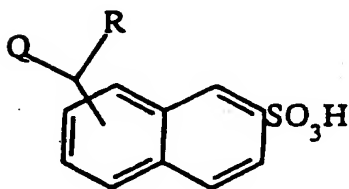


Figure 1. Structure of Iso-C15-C15 Naphthalene Sulfonic Acid



$$R + Q \geq 29$$

where R & Q are alkyl chains with at least one branched methyl or longer alkyl group for every 20 carbons

Figure 2. Preferred Asphaltene Dispersant Structure